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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/055,156	04/04/1998	HILLEL GAZIT	0000001	3555

7590 06/18/2002

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EXAMINER
HOM, SHICK C

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 06/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/055,156	GAZIT, HILLEL	
	Examiner	Art Unit	
	Shick C Hom	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 April 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-149* is/are pending in the application.

4a) Of the above claim(s) *3,46,48,67,72,75 and 82* is/are withdrawn from consideration.

5)☒ Claim(s) *4-19,51-53,57-62,65,66,68-74,76-78 and 83* is/are allowed.

6)☒ Claim(s) *1, 2, 20-45, 47, 49, 50, 54-56, 63, 64, 79-81, 84-149* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4-3-02 have been fully considered but they are not persuasive.

In page 9 line 20 to page 10 line 14, applicant argued that Taggart, Jr. does not teach accelerating or delaying digital data is not persuasive because col. 4 lines 3-10 which recite block of digital data being stored on the tape consisting of a series of eight bit bytes wherein the bits of each eight bit byte are recorded in parallel on each of eight tracks and a ninth track being reserved for a parity bit clearly anticipate the digital data as now argued and col. 5 line 60 to col. 6 line 25 which recite using a counter to control a window for accessing the digital data whereby when the counter overflows a clock pulse is added or subtracted to the clock pulse per data bit cycle to either accelerate or delay the generation of subsequent windows for accessing the digital data clearly reads on the apparatus for removing an overflow condition including means for delaying and means for accelerating the data stream portion as in claims 1 and 2. Taggart, Jr. in col. 7 line 50 to col. 8 line 24 which

recite inserting correction constants for the purpose of preserving twelve bit window alignment clearly reads on inserting null packets and deleting null packets as argued in page 10 lines 26-31. In response to applicant's argument in page 11 lines 1-21 that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

3. Claim 139 is objected to because of the following informalities: in claim 139 line 2 delete "newdata stream" and insert ---new data stream--- for consistency. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 2, 124-135, and 140 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2 line 2 which recite "an overflow condition" is not clear as to whether it is reciting ---said overflow condition--- as in claim 2 line 1. In claim 140 line 1 which recite "wherein the step of detecting the first digitally encoded data stream portion" lacks clear antecedent basis because no step of detecting the first digitally encoded data stream portion have been previously recited in the claims and therefore the limitation is not clearly understood.

Claims 124-135 are rejected under 35 U.S.C. 112, second paragraph because they depend from rejected claim 2.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 79, 84, 88-90, and 96-101 are rejected under 35 U.S.C. 102(b) as being anticipated by Taggart, Jr. et al.

Taggart, Jr. et al. disclose all the subject matter now claimed. Note col. 1 lines 6-10 which recite a magnetic tape reading equipment including circuit for generating an electronic window to detect encoded data and col. 7 lines 6-18 which recite the Control Circuit having a Read Out Counter to ensure that data is not read from the Deskew Buffer before it is loaded into the Deskew Buffer from the data generation circuit whereby if an overlap occurs, an overflow condition will be detected clearly anticipate the step of detecting digitally encoded data stream causing an overflow condition as in claims 1, 2, and 71, and

transmitting and outputting digitally encoded data stream as in claims 79 and 98. Col. 5 line 60 to col. 6 line 25 which recite a Phase Lock Loop Circuit receiving a clock input for generating a window for the purpose of anticipating the data rate wherein an electronic window opens before the time when the data bit is expected and remains open after the data bit was expected whereby if there is a long variation between the anticipated and actual bit rates, the window will tend to be consistently early or late, depending on the direction of the long term variation; this variation is corrected by using a counter which will either count up or down depending on whether the last data bit was received earlier or later than expected and when the counter overflows, either positively or negatively, a clock pulse will be added or subtracted to the clock pulse per data bit cycle to either accelerate or delay the generation of subsequent windows to compensate for the variations clearly anticipate the step of delaying the first data stream for a delay time to prevent overflow condition and the step of accelerating the second data stream preceded by the first data stream to substantially make-up for the delay time as in claims 1, 2 and the steps of modifying a current timing reference and aligning a portion of the new data stream as in claim 71. Col. 7 line 50 to col. 8 line 24 which recite that since corrections of up to six clocks may be added,

the dead time during which reading of bit will be inhibited wherein correction constants are inserted during the dead time so that the twelve bit window is not disturbed clearly reads on the step of delaying having the step of inserting null packets and the step of accelerating deletes other null packets as in claims 21, 84, 88-90, and 93-101.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 20-24, 43, 47, 54-56, 63-64, 85-87, 91-95, 112-115, 118, 129-132, 135, and 141-143 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taggart, Jr. et al. as applied to claim 1 above, and further in view of Fox et al.

Taggart, Jr. et al. did not recite the steps of detecting, delaying and accelerating being performed in real-time as in claims 43, 54, 85, 91. Taggart, Jr. et al. did not recite the

use of a computer-readable storage medium and a computer as in claim 47 and the step of determining a delay caused by re-scheduling transmission according to a formula as in claims 22-23. Taggart, Jr. et al. did not recite splicing of data stream portions as in claims 20, 24, means for determining a splice-in point and means for closing an open group of pictures as in claims 55-56 and the method of decoding as in claim 62. Taggart, Jr. et al. did not recite contiguous packets, the video frames, the digital video streams being MPEG-2 as in claims 114, 115, 118, 131, 132, 135, 143, 112, 113, 129, 130, 141, and 142, respectively.

Fox et al. teach that it is known to provide timing information including program clock reference PCR, presentation time stamp, and decoding time stamp PTS/DTS in the transport streams and timing of "real" time encoding of the encoding section as set forth at col. 5 line 63 to col. 6 line 12 in the field of television for the purpose of preserving audio and video presentation synchronization during splicing operation which clearly anticipate the steps of detecting, delaying and accelerating being performed in real-time as in claims 43, 54, 85, 91. Col. 3 lines 24-35 which recite the use a computer or a storage device at the clients/receiver for controlling the resources within the source section clearly anticipate use of a

computer-readable storage medium and a computer as in claim 47 and the step of determining a delay caused by re-scheduling transmission according to a formula as in claims 22-23. Col. 1 lines 55-67 which recite means for maintaining synchronization between the video signal and the associated audio signal including the synchronization of a soundtrack consisting of dialogue, music, and effects with the pictures of a program and col. 2 lines 39-47 which recite means for determining the spacing between audio access units at the splice point for alignment of video streams whereby the decoder is specified to mute when no audio access unit is applied, e.g., a gap, or when an incomplete audio access unit is decoded clearly anticipate splicing of data stream portions as in claims 20, 24, means for determining a splice-in point, means for closing an open group of pictures, and the method of decoding as in claims 55-56 and 63-64. Col. 1 lines 30-44 which recite the use of the MPEG-2 systems level standards as set forth in ISO/IEC 13818-1 recommendation clearly anticipate the digital video streams being MPEG-2 as in claims 112, 113, 129, 130, 141, and 142.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the steps of detecting, delaying and accelerating in real-time, the use of a computer-readable storage medium including a computer, the step

of determining a delay caused by re-scheduling transmission according to a formula, splicing of data stream portions, means for determining a splice-in point, means for closing an open group of pictures, the method of decoding and the digital video streams being MPEG-2 as taught by Fox et al. to the circuit of Taggart, Jr. et al. because Fox et al. teach the desirable advantage of preserving audio and video presentation synchronization during splicing operation and said preserving audio and video presentation synchronization being desirable to achieve efficient system operation in Taggart, Jr. et al.

Allowable Subject Matter

9. Claims 4-19, 51-53, 57-62, 65-66, 68-74, 76-78, and 83 are allowed.

10. Claims 25-42 44-45, 49-50, 80, 81, 102-111, 116, 117, 119-128, 133, 134, 136-140, 144-149 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. **Any response to this final action should be mailed to:**

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications; please mark "EXPEDITED PROCEDURE")

Or:

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick Hom whose telephone number is (703) 305-4742.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4750.

DANG TON
PRIMARY EXAMINER

SH

June 8, 2002